

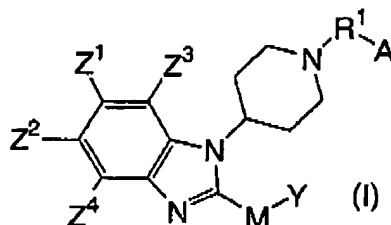
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Amendments to the Claims:

1. (Original) A compound of the following formula:



or a salt thereof, wherein

R^1 is selected from the group consisting of (C_3-C_{11}) cycloalkyl, (C_6-C_{16}) bicycloalkyl, (C_6-C_{16}) tricycloalkyl and (C_8-C_{16}) tetracycloalkyl, wherein said groups are partially saturated, fully saturated or fully unsaturated and are optionally substituted with 1 to 3 substituents independently selected from the group consisting of halo, hydroxy, (C_1-C_5) alkyl and (C_3-C_7) cycloalkyl;

A is attached to the same carbon atom of R^1 , that is also attached to the nitrogen atom of the piperidine ring, and is selected from the group consisting of (C_1-C_7) alkyl optionally substituted with 1 to 3 halo; (C_2-C_5) alkenyl; (C_2-C_5) alkynyl; phenyl- (C_1-C_5) alkyl optionally substituted at the phenyl moiety with 1 to 3 substituents; hydroxy- (C_1-C_4) alkyl; (C_1-C_4) alkoxy- $(C=O)$; aryl optionally substituted with 1 to 3 substituents; and an aromatic or non-aromatic heterocyclic ring comprising four to ten ring atoms wherein one to four ring atoms are independently selected from nitrogen, oxygen and sulfur and said aromatic or non-aromatic heterocyclic ring is optionally substituted with 1 to 3 substituents, and the phenyl moiety in the substituents attached to said phenyl moiety in the phenyl- (C_1-C_5) alkyl, aryl, or heterocyclic ring is optionally substituted with 1 to 3 substituents independently selected from the group consisting of halo; hydroxy; (C_1-C_4) alkyl optionally substituted with 1 to 3 halo; (C_1-C_4) alkoxy optionally substituted with 1 to 3 halo; (C_1-C_4) alkyl-CO-; phenyl; benzyl; -CH₂-; cyano; (C_1-C_4) alkyl-CO-; NH₂-CO-; NH₂-CH₂-; amino; (C_1-C_4) alkyl-NH-; di[(C_1-C_4) alkyl]-N-; (C_1-C_4) alkyl-CO-NH-; (C_1-C_4) alkyl-NH-CO-; hydrazino; azido; ureido; amidino; guanidino; oxo and =N-OH;

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M is selected from the group consisting of a single covalent bond, CH₂, O, S, SO, SO₂, CO, NH, N[(C₁-C₆)alkyl], CONH and NHCO;

Y is selected from the following:

- (a) 4- to 12-membered bicyclic-carbocyclic rings wherein said bicyclic-carbocyclic rings are optionally substituted with 1 to 6 substituents independently selected from the group consisting of halo, hydroxy, (C₁-C₄)alkyl optionally substituted with 1 to 3 halo; (C₁-C₄)alkoxy optionally substituted with 1 to 3 halo; (C₁-C₄)alkyl-CO-; phenyl; benzyl; -CHO; cyano; (C₁-C₄)alkyl-CO-; NH₂-CO-; NH₂-CH₂-; amino; (C₁-C₄)alkyl-NH-; di[(C₁-C₄)alkyl]-N-; (C₁-C₄)alkyl-CO-NH-; (C₁-C₄)alkyl-NH-CO-; hydrazino; azido; ureido; amidino; guanidino; oxo and =N-OH, wherein the optionally substituted (C₁-C₄)alkyl are attached to the carbon or nitrogen atoms and other substituents are attached to the carbon atoms in the bicyclic-heterocyclic ring; with the proviso that said bicyclic-carbocyclic ring is not a benzofused ring;
- (b) 4- to 12-membered bicyclic-heterocyclic rings wherein 1 to 6 ring atoms are independently selected from nitrogen, oxygen and sulfur wherein said bicyclic-heterocyclic rings are optionally substituted with 1 to 6 substituents independently selected from the group consisting of halo, hydroxy, (C₁-C₄)alkyl optionally substituted with 1 to 3 substituents independently selected from halo, hydroxy, (C₁-C₃)alkyl-SO₂NH₂- and NH₂C(=O)NH-; (C₁-C₄)alkoxy optionally substituted with 1 to 3 halo; (C₁-C₄)alkyl-CO-; aryl optionally substituted with 1 to 3 substituents independently selected from halo, (C₁-C₄)alkyl optionally substituted with 1 to 3 halo and (C₁-C₄)alkoxy; benzyl optionally substituted with 1 to 3 substituents independently selected from halo, (C₁-C₄)alkyl optionally substituted with 1 to 3 halo and (C₁-C₄)alkoxy; -CHO; cyano; (C₁-C₄)alkyl-CO-; NH₂-CO-; NH₂-CH₂-; amino; (C₁-C₄)alkyl-NH-; di[(C₁-C₄)alkyl]-N-; (C₁-C₄)alkyl-CO-NH-; (C₁-C₄)alkyl-NH-CO-; hydrazino; azido; ureido; amidino; guanidino; oxo and =N-OH, wherein the optionally substituted (C₁-C₄)alkyl are attached to the carbon or nitrogen atoms and other

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substituents are attached to the carbon atoms in the bicyclic-heterocyclic ring;
with the proviso that said bicyclic-heterocyclic ring is not a benzofused ring;

(c) 5- to 17 membered spirocarbocyclic rings wherein said spirocarbocyclic rings are optionally substituted with 1 to 6 substituents independently selected from the group consisting of halo; hydroxy; (C₁-C₄)alkyl optionally substituted with 1 to 3 halo; (C₁-C₄)alkoxy optionally substituted with 1 to 3 halo; (C₁-C₄)alkyl-CO-; phenyl; benzyl; -CHO; cyano; (C₁-C₄)alkyl-CO-; NH₂-CO-; NH₂-CH₂-; amino; (C₁-C₄)alkyl-NH-; di[(C₁-C₄)alkyl]-N-; (C₁-C₄)alkyl-CO-NH-; (C₁-C₄)alkyl-NH-CO-; hydrazino; azido; ureido; amidino; guanidino; oxo and =N-OH;

(d) 5- to 17-membered spiroheterocyclic rings wherein 1 to 6 ring atoms are independently selected from nitrogen, oxygen and sulfur, wherein said spiroheterocyclic rings are optionally substituted with 1 to 6 substituents independently selected from the group consisting of halo; hydroxy; (C₁-C₄)alkyl optionally substituted with 1 to 3 halo; (C₁-C₄)alkoxy optionally substituted with 1 to 3 halo; (C₁-C₄)alkyl-CO-; phenyl; benzyl; -CHO; cyano; (C₁-C₄)alkyl-CO-; NH₂-CO-; NH₂-CH₂-; amino; (C₁-C₄)alkyl-NH-; di[(C₁-C₄)alkyl]-N-; (C₁-C₄)alkyl-CO-NH-; (C₁-C₄)alkyl-NH-CO-; hydrazino; azido; ureido; amidino; guanidino; oxo and =N-OH; and

Z¹, Z², Z³ and Z⁴ are independently selected from the group consisting of hydrogen, halo, (C₁-C₄)alkyl optionally substituted with 1 to 3 halo; (C₁-C₄)alkoxy optionally substituted with 1 to 3 halo; (C₁-C₄)alkylsulfonyl; (C₁-C₄)alkyl-CO-; carboxy; (C₁-C₄)alkyl-COO-; amino; NH₂CO-; (C₁-C₄)alkyl-CO-NH-; (C₁-C₄)alkyl-SO₂-NH-; phenyl and naphthyl.

2. (Currently Amended) A compound according to Claim 1 or a salt thereof, wherein R¹ is (C₃-C₁₁)cycloalkyl, wherein said cycloalkyl is partially saturated, fully saturated or fully unsaturated and is optionally substituted with 1 to 3 substituents independently

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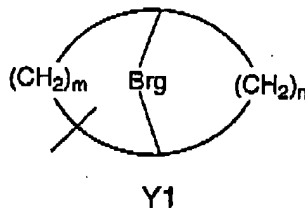
selected from the group consisting of halo, hydroxy, (C₁-C₅)alkyl and (C₃-C₇)cycloalkyl;

A is attached to the same carbon atom of R¹, that is also attached to the nitrogen atom of the piperidine ring, and is selected from the group consisting of (C₁-C₇)alkyl optionally substituted with 1 to 3 halo; (C₂-C₅)alkenyl; (C₂-C₅)alkynyl; hydroxy-(C₁-C₄)alkyl; (C₁-C₄)alkoxy-(C=O); aryl optionally substituted with 1 to 3 substituents; and an aromatic or non-aromatic heterocyclic ring comprising four to six ring atoms wherein one to two ring atoms are independently selected from nitrogen, oxygen and sulfur and said aromatic or non-aromatic heterocyclic ring is optionally substituted with 1 to 3 substituents; and the substituents said aryl or heterocyclic wherein each of said is optionally substituted with 1 to 3 substituents, and the substituents attached to said aryl or heterocyclic ring are independently selected from halo; (C₁-C₄)alkyl optionally substituted with 1 to 3 halo; (C₁-C₄)alkoxy optionally substituted with 1 to 3 halo; (C₁-C₄)alkyl-CO-; NH₂-CO-; NH₂-CH₂-; amino; (C₁-C₄)alkyl-NH-; di[(C₁-C₄)alkyl]-N-; (C₁-C₄)alkyl-CO-NH- and (C₁-C₄)alkyl-NH-CO-;

M is selected from group consisting of a covalent bond, CH₂, O, S, SO₂, CO, NH, N [(C₁-C₆)alkyl], CONH and NHCO;

Y is selected from the following:

(a) bicyclic rings represented by formula Y1:



wherein m and n are independently 1, 2, 3 or 4; Brg is selected from (CH₂)_p wherein p is 0, 1 or 2, and N-(C₁-C₄)alkyl; and Y1 is optionally substituted with 1 to 4 substituents independently selected from the group consisting of hydroxy; (C₁-C₄)alkyl optionally substituted with 1 to 3 halo; (C₁-C₄)alkoxy optionally substituted with 1 to 3 halo; (C₁-

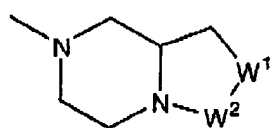
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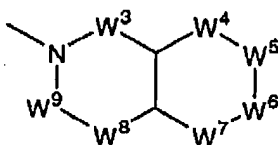
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(C₄)alkyl-CO-; phenyl; benzyl; (C₁-C₄)alkyl-CO-; NH₂-CO-; NH₂-CH₂-; amino; (C₁-C₄)alkyl-NH-; di[(C₁-C₄)alkyl]-N-; (C₁-C₄)alkyl-CO-NH-; (C₁-C₄)alkyl-NH-CO-; oxo and =N-OH;

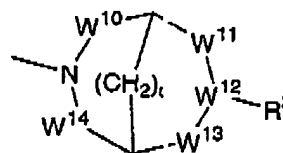
(b) 6- to 10-membered bicyclic-heterocyclic rings, containing 1 to 4 hetero atoms in the ring, represented by formula Y2, Y3 or Y4:



Y2



Y3



Y4

wherein

W¹ is selected from CH₂, CH₂CH₂, O, S and NH;

W² is selected from CH₂, O, S, NH and C=O;

W³ is selected from a covalent bond, CH₂, O, S, NH and C(=O)-NH;

W⁴ is selected from a covalent bond, CH₂, O, S and NH;

W⁵ is selected from a covalent bond, CH₂, CH(CH₂OH), CH(CH₂NHISO₂CH₃), CH(CH₂NHC(=O)NH₂), CH₂CH₂, O, S, NH and C(=O);

W⁶ is selected from CH₂, O, S, NH and N[(C₁-C₄)alkyl];

W⁷ is selected from a covalent bond, CH₂, O, S, NH and C(=O);

W⁸ is selected from a covalent bond, CH₂, O, S and NH;

W⁹ is selected from a covalent bond, CH₂, O, S, NH, CH₂CH₂ and C(=O);

W¹⁰, W¹¹, W¹³ and W¹⁴ are independently selected from covalent bond, CH₂, O, S, and NH;

W¹² is selected from CH and N;

q is 1 or 2; and

R² is selected from hydrogen, (C₁-C₄)alkyl and amino; and

said bicyclic-heterocyclic rings of formula Y2, Y3 or Y4 is optionally substituted with 1 to 4 substituents independently selected from the group consisting of halo; hydroxy;

(C₁-C₄)alkyl optionally substituted with 1 to 3 halo; (C₁-C₄)alkoxy optionally

substituted with 1 to 3 halo; (C₁-C₄)alkyl-CO-; aryl optionally substituted with 1 to

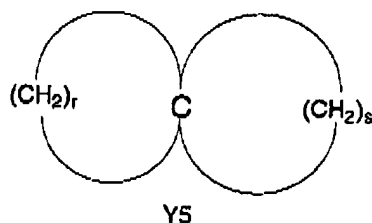
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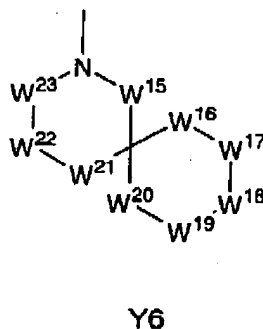
3 substituents independently selected from halo, (C₁-C₄)alkyl optionally substituted with 1 to 3 halo and (C₁-C₄)alkoxy; benzyl optionally substituted with 1 to 3 substituents independently selected from halo, (C₁-C₄)alkyl optionally substituted with 1 to 3 halo and (C₁-C₄)alkoxy; -CHO; cyano; (C₁-C₄)alkyl-CO-; NH₂-CO-; NH₂-CH₂-; amino; (C₁-C₄)alkyl-NH-; di[(C₁-C₄)alkyl]-N-; (C₁-C₄)alkyl-CO-NH-; (C₁-C₄)alkyl-NH-CO-; oxo and =N-OH;

(c) spirocarbocyclic rings represented by formula Y5:



wherein r and s are independently 2, 3, 4 or 5; and said spirocarbocyclic ring or formula Y5 is optionally substituted with 1 to 4 substituents independently selected from the group consisting of hydroxy; (C₁-C₄)alkyl optionally substituted with 1 to 3 halo; (C₁-C₄)alkoxy optionally substituted with 1 to 3 halo; (C₁-C₄)alkyl-CO-; phenyl; benzyl; (C₁-C₄)alkyl-CO-; NH₂-CO-; NH₂-CH₂-; amino; (C₁-C₄)alkyl-NH-; di[(C₁-C₄)alkyl]-N-; (C₁-C₄)alkyl-CO-NH-; (C₁-C₄)alkyl-NH-CO-; oxo and =N-OH; and either of monocyclic carbocyclic ring in Y5 is optionally fused to a benzene or (C₄-C₆)carbocyclic ring;

(d) 10- to 15-membered spiroheterocyclic rings, containing 1 to 4 hetero atoms in the ring, represented by formula Y6:



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wherein

W^{15} , W^{16} , W^{17} , W^{18} , W^{19} , W^{20} and W^{23} are independently selected from the group consisting of a covalent bond CH_2 , O, S and NH;

W^{21} is selected from the group consisting of a covalent bond CH_2 , O, S, NH and $N[(C_1-C_4)alkyl]$;

W^{22} is selected from the group consisting of a covalent bond CH_2 , O, S, NH and $C(=O)$; said spiroheterocyclic ring of formula Y6 is optionally substituted with 1 to 4 substituents independently selected from the group consisting of halo; hydroxy; $(C_1-C_4)alkyl$ optionally substituted with 1 to 3 halo; $(C_1-C_4)alkoxy$ optionally substituted with 1 to 3 halo; $(C_1-C_4)alkyl-CO-$; phenyl; benzyl; $-CHO$; cyano; $(C_1-C_4)alkyl-CO-$; NH_2-CO- ; NH_2-CH_2- ; amino; $(C_1-C_4)alkyl-NH-$; $di[(C_1-C_4)alkyl]-N-$; $(C_1-C_4)alkyl-CO-NH-$; $(C_1-C_4)alkyl-NH-CO-$; hydrazino; azido; ureido; amidino; guanidino; oxo and $=N-OH$; and optionally fused to a cyclohexane, benzene or pyridine ring; and

Z^1 , Z^2 , Z^3 and Z^4 are independently selected from the group consisting of hydrogen and halo.

3. (Original) A compound according to Claim 2 or a salt thereof, wherein R^1 is selected from the group consisting of $(C_3-C_{11})cycloalkyl$;

A is attached to the carbon atom of R^1 , which is attached to the nitrogen atom of the piperidine ring, and selected from the group consisting of $(C_1-C_7)alkyl$, hydroxy- $(C_1-C_2)alkyl$, $(C_1-C_4)alkoxy-(C=O)$, $(C_2-C_5)alkenyl$, phenyl and naphthyl;

M is selected from the group consisting of a covalent bond, CH_2 , O, SO_2 , CO, NH, $N[(C_1-C_6)alkyl]$, and $NHCO$;

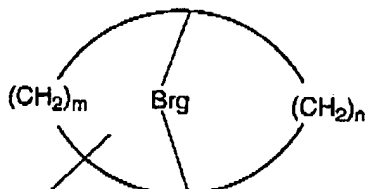
Y is selected from bicyclic rings represented by formula Y1; 6- to 10-membered bicyclic-heterocyclic rings, containing 1 to 4 hetero atoms in the ring, represented by

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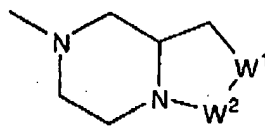
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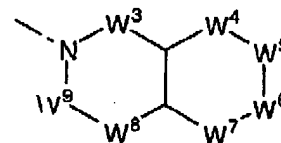
formula Y2, Y3 and Y4; and 10- to 15-membered spiroheterocyclic rings, containing 1 to 4 hetero atoms in the ring, represented by formula Y6:



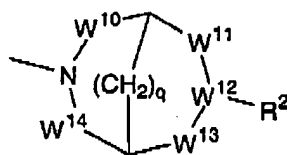
Y1



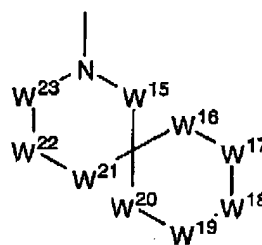
Y2



Y3



Y4



Y6

wherein

m and n are independently 1, 2, 3 or 4;

Brg is N-(C₁-C₄)alkyl;

W¹ is selected from CH₂, CH₂CH₂, O and NH;

W² is selected from CH₂ and C=O;

W³ is selected from a covalent bond, CH₂ and C(=O)-NH;

W⁴ is selected from a covalent bond, CH₂ and O;

W⁵ is selected from a covalent bond, CH₂, CH(CH₂OH), CH(CH₂NHSO₂CH₃),

CH(CH₂NHC(=O)NH₂), CH₂CH₂ and C(=O);

W⁶ is selected from CH₂, NH and N[(C₁-C₄)alkyl];

W⁷ is selected from a covalent bond, CH₂ and C(=O);

W⁸ is selected from a covalent bond and CH₂;

W⁹ is selected from a covalent bond, CH₂, CH₂CH₂ and C(=O);

W¹⁰, W¹¹, W¹³ and W¹⁴ are independently selected from a covalent bond and CH₂;

W¹² is selected from CH and N;

q is 1 or 2;

R² is selected from hydrogen, (C₁-C₄)alkyl and amino;

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W^{15} , W^{16} , W^{17} , W^{18} , W^{19} , W^{20} and W^{23} are independently selected from the group consisting of a covalent bond and CH_2 ;

W^{21} is selected from the group consisting of a covalent bond CH_2 , NH and $N[(C_1-C_4)alkyl]$;

W^{22} is selected from the group consisting of a covalent bond CH_2 and $C(=O)$;

said group of formula of Y2, Y3 or Y4 is optionally substituted with 1 to 4 substituent independently selected from the group consisting of $(C_1-C_4)alkyl$; a yl optionally substituted with 1 to 3 substituents independently selected from halo, $(C_1-C_4)alkyl$ optionally substituted with 1 to 3 halo and $(C_1-C_4)alkoxy$; and benzyl optionally substituted with 1 to 3 substituents independently selected from halo, $(C_1-C_4)alkyl$ optionally substituted with 1 to 3 halo and $(C_1-C_4)alkoxy$; and said group of formula Y6 is optionally fused to a cyclohexane, benzene or pyridine ring; and optionally substituted with 1 to 4 substituents independently selected from the group consisting of $(C_1-C_4)alkyl$, $(C_1-C_4)alkoxy$ and aryl;

Z^1 and Z^2 are independently selected from the group consisting of hydrogen and halo; and Z^3 and Z^4 are both hydrogen.

4. (Original) A compound according to Claim 3 or a salt thereof, wherein R^1 is $(C_6-C_{10})cycloalkyl$;

A is attached to the carbon atom of R^1 , which is attached to the nitrogen atom of the piperidine ring, and is selected from the group consisting of $(C_1-C_7)alkyl$ and, phenyl;

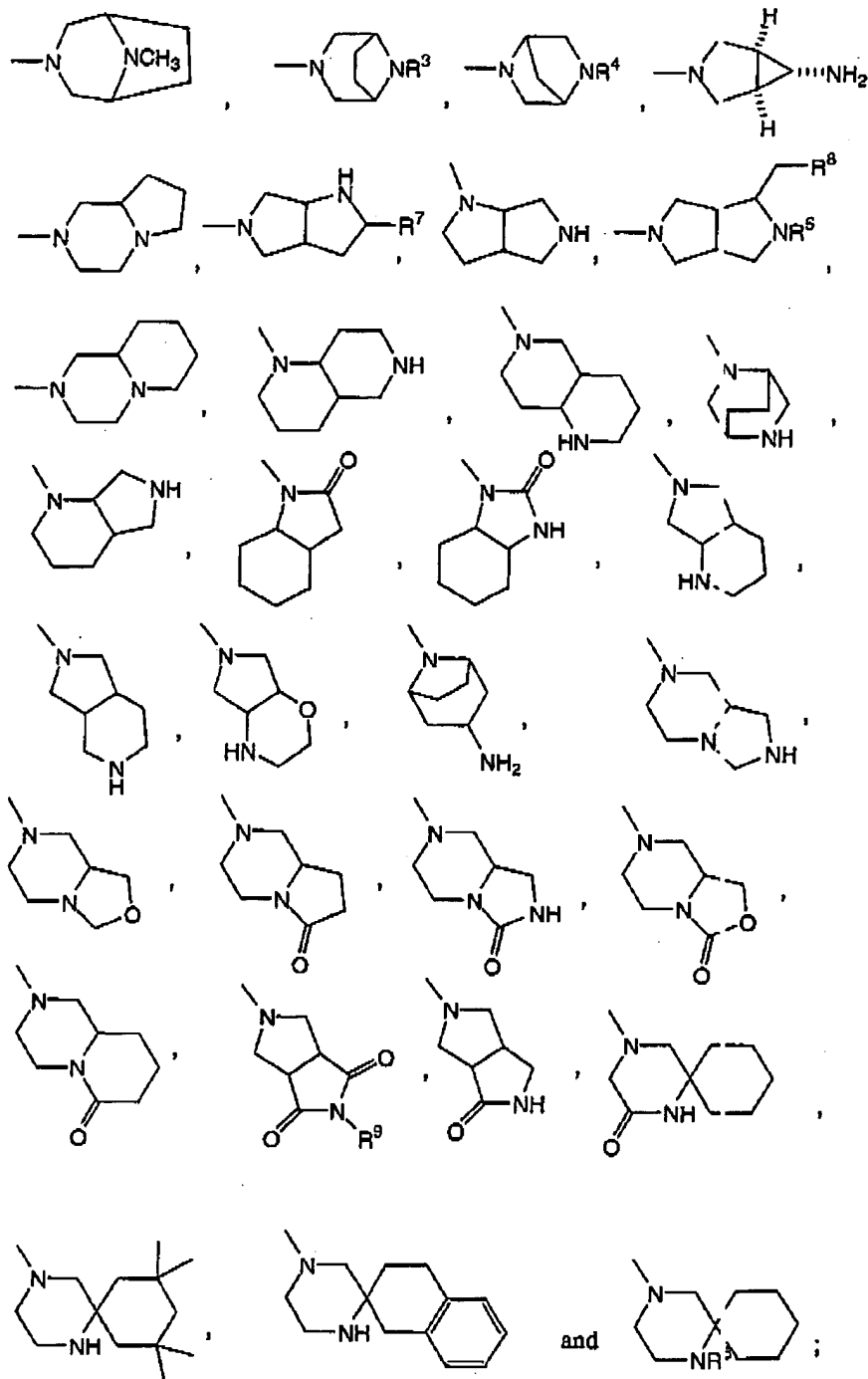
M is selected from group consisting of a covalent bond, CH_2 , O, SO_2 , CO, NH, $N[(C_1-C_6)alkyl]$ and $NHCO$,

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Y is selected from:



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wherein R^3 , R^4 , R^5 , R^6 , R^7 and R^9 are independently selected from the group consisting of hydrogen and (C_1-C_4) alkyl;

R^8 is selected from the group consisting of hydroxy, $NHSO_2CH_3$ and $NHC(=O)NH_2$;
and

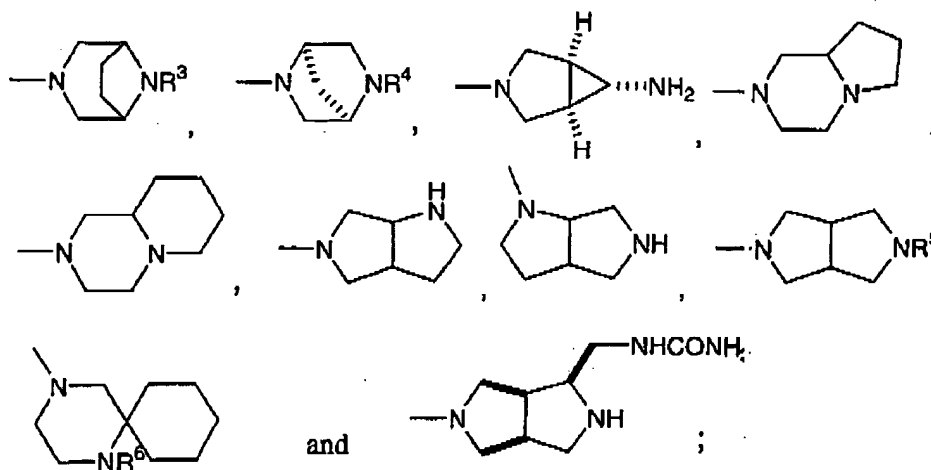
Z^1 , Z^2 , Z^3 and Z^4 are all hydrogen.

5. (Original) A compound according to Claim 4 or a salt thereof, wherein
 R^1 is (C_7-C_9) cycloalkyl;

A is attached to the carbon atom of R^1 , which is attached to the nitrogen atom of the piperidine ring, and is selected from the group consisting of methyl and phenyl;

M is selected from group consisting of a covalent bond, CH_2 , O, CO, NH, $N[(C_1-C_6)alkyl]$ and $NHCO$,

Y is selected from:



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wherein R^3 , R^4 , R^5 and R^6 are independently selected from the group consisting of hydrogen and (C₁-C₄)alkyl; and

Z^1 , Z^2 , Z^3 and Z^4 are all hydrogen.

6. (Original) A compound according to Claim 1 selected from
4-[1-[1-(1-methylcyclooctyl)-4-piperidinyl]-1*H*-benzimidazole-2-yl]-1,4-diazaspiro[5.5]undecane;
2-hexahydropyrrolo[3,4-*c*]pyrrol-2(1*H*)-yl-1-[1-(1-methylcyclooctyl)-4-piperidinyl]-1*H*-benzimidazole;
2-(3,8-Diazabicyclo[3.2.1]oct-3-yl)-[1-(1-methylcyclooctyl)-4-piperidinyl]-1*H*-benzimidazole; and
N-[(1*SR*, 3*aSR*, 6*aSR*)-5-[1-[1-(1-Methylcyclooctyl)-4-piperidinyl]-1*H*-benzimidazol-2-yl]octahydropyrrolo[3,4-*c*]pyrrole-1-ylmethyl]urea; and a salt thereof.
7. (Cancelled)
8. (Cancelled)
9. (Cancelled)
10. (Currently Amended) A method for treating a disorder or condition in a mammal, where the disorder or condition is selected from the group consisting of neuropathic pain, inflammatory diseases, inflammation-related hyperalgesia, eating disorder, arterial blood pressure disorders, tolerance to narcotic analgesics, dependence on narcotic analgesics, anxiety, stress disorders, psychic trauma, schizophrenia, Parkinson's disease, chorea, depression, Alzheimer's disease, dementias, epilepsy and convulsions, or for anesthetizing a mammal including a human, or for alleviating pain, producing a neuroprotective effect, enhancing analgesic, controlling water balance, hearing

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~~regulation, controlling sodium ion excretion or ameliorating brain function in a~~
mammal comprising administering to said mammal an effective amount of a compound
of Claim 1 or a pharmaceutically acceptable salt thereof and a pharmaceutically
acceptable carrier.

11. A pharmaceutical composition comprising an amount of a compound according to
Claim 1, or pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable
carrier.